

Amendments to the Claims:

Please amend the claims as shown in the following listing of claims, which will replace all prior versions and listings of claims in the application.

1.-21. (Canceled)

22. (New) A peptide compound comprising:

a polypeptide (i) comprising a 30 amino acid-long amino acid sequence contained in a “knob” domain of a fiber protein of an adenovirus capsid, the amino acid sequence comprising an amino acid chaining forming double β -sheet structure (“EF”) contained in the “knob” domain; or

a peptide (ii) analogous to the polypeptide (i), the amino acid sequence of which comprises, as compared to the polypeptide (i) sequence, at least one amino acid substitution or at least one amino acid deletion, the analogous peptide retaining the double β -sheet structure.

23. (New) The peptide of claim 1, wherein for the polypeptide (i), the amino acid chaining forming the double β -sheet structure referred to as “EF” comprised in the “knob” domain of the fiber protein of an adenovirus capsid is localized approximately in the middle of the amino acid sequence of the polypeptide.

24. (New) The peptide of claim 1, wherein polypeptide (i) is at most 195 amino acids long.

25. (New) The peptide of claim 1, wherein for the polypeptide (i), the adenovirus is a human adenovirus.

26. (New) The peptide of claim 4, wherein the human adenovirus is selected from sub-group B and C adenoviruses.

27. (New) The peptide of claim 4, wherein the human adenovirus is selected from the group consisting of adenoviruses having serotypes 12, 18, 31, 3, 7, 11, 14, 16, 21, 34, 35, 1, 2, 5, 6, 8, 9, 10, 13, 15, 17, 19, 20, 22, 23, 24, 25, 26, 27, 28, 29, 30, 32, 33, 36, 37, 38, 39, 42, 43, 44, 45, 46, 47, 48, 49, 4, 40 and 41.

28. (New) The peptide of claim 4, wherein polypeptide (i) comprises an amino acid sequence:

beginning with amino acid at position 463 and ending with amino acid at position 515 of SEQ ID NO:1;

beginning with amino acid at position 195 and ending with amino acid at position 247 of SEQ ID NO:2; or

beginning with amino acid at position 472 and ending with amino acid at position 535 of SEQ ID NO:3.

29. (New) The peptide of claim 1, wherein the analogous peptide (ii) comprises from 2 to 10 amino acid substitutions or deletions, as compared to the amino acid sequence of the polypeptide (i).

30. (New) The peptide of claim 1, wherein the polypeptide (i) or analogous peptide (ii) is a cyclic polypeptide.

31. (New) The peptide of claim 1, further defined as covalently bound to an antigen.

32. (New) A composition comprising a peptide of claim 1 in combination with at least one physiologically compatible excipient.

33. (New) A method of boosting the activity of an immunogenic composition or of a vaccine composition comprising administering to a subject a peptide of claim 22.

34. (New) The method of claim 33, wherein the peptide is covalently bound to an antigen.

35. (New) The method of claim 34, wherein the subject is a human.

36. (New) A composition comprising a booster compound of claim 1 in combination with at least one antigen.

37. (New) A method for maturing human or animal immature dendritic cells comprising:

a) culturing in a suitable culture medium a cell population enriched with human or animal immature dendritic cells; and

b) incubating the cells cultured in step a) with a peptide of claim 1 for a time sufficient to induce dendritic cell maturation;
wherein dendritic maturation is introduced.

38. (New) The method of claim 37, further comprising adding to the cells at least one antigen.

39. (New) The method of claim 37, wherein the peptide is conjugated to an antigen.

40. (New) A cell population enriched with mature dendritic cells comprising a peptide of claim 1.

41. (New) The cell population of claim 40, further comprising an antigen.